ERRATUM: Perfluorooctanoic Acid Concentrations for Participants in the C8 Health Project

[119(12):1760-1765 (2011)]

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In "Retrospective Exposure Estimation and Predicted versus Observed Serum Perfluorooctanoic Acid Concentrations for Participants in the C8 Health Project" (Shin et al. 2011b), we reported estimates of historical perfluorooctanoic acid (PFOA) exposures and serum concentrations for 45,276 nonoccupationally exposed participants in the C8 Health Project who consented to share their residential histories. We recently discovered an inconsistency in our estimates of historical water concentrations for some of these participants. For four public water districts (Belpre, Little Hocking, New Lubeck, and Tuppers Plains), the water concentrations used to estimate exposures and predicted serum concentrations were not consistent with water concentration estimates we reported in another article, "Environmental Fate and Transport Modeling for Perfluorooctanoic Acid Emitted from the Washington Works Facility in West Virginia" (Shin et al. 2011a). The difference in water concentration estimates slightly affects our estimates of PFOA exposures and serum concentrations. The Spearman's rank correlation coefficient (*r*_S) between updated serum estimates and the originally reported values is 0.996.

A cohort follow-up also resulted in the addition of 118 new participants (all who had provided consent), as well as the removal of 1,945 participants who had been newly identified as having historical occupational exposure to PFOA. Updated summary statistics comparing predicted and observed serum concentrations are shown in Table 1. Among all participants (n = 43,449), updated serum PFOA concentration predictions are largely similar to the originally reported values (e.g., medians of 13.7 ppb and 14.2 ppb for updated and originally reported values, respectively; for predicted versus observed serum concentrations, $r_S = 0.677$ and 0.674 for updated and originally reported values, respectively). Updating the water concentrations resulted in a decrease of 0.2 ppb in median serum concentration estimates, and the removal of newly identified DuPont workers resulted in a decrease of 0.3 ppb. We found no noticeable change in the updated summary statistics from the addition of the 118 new participants.

In summary, the two sets of predictions are very similar and match the observed serum equally well. This update does not substantially change the conclusions of our study (Shin et al. 2011b).

The authors declare they have no actual or potential competing financial interests.

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REFERENCE

Shin HM, Vieira VM, Ryan PB, Detwiler R, Sanders B, Steenland S, et al. 2011a. Environmental fate and transport modeling for perfluorooctanoic acid emitted from the Washington Works Facility in West Virginia. Environ Sci Technol 45:1435–1442.

Shin HM, Vieira VM, Ryan PB, Steenland K, Bartell SM. 2011b. Retrospective exposure estimation and predicted versus observed serum perfluorooctanoic acid concentrations for participants in the C8 Health Project. Environ Health Perspect 119:1760–1765.

Table 1. Summary of serum predictions for different subgroups of participants.

			Media	n (ppb)	Close		
Characteristic	n	$r_{\rm S}$	Predicted	Observed	Underprediction ^a	${\it approximation}^a$	Overprediction ^a
All participants	43,449	0.68	13.7	23.5	34.6	51.3	14.0
Water consumption data available	23,052	0.70	15.3	24.8	33.8	50.5	15.6
Residence in one of the six water districts in 2005/2006	23,971	0.75	27.7	36.2	24.2	58.8	17.0
Same residence and workplace in one of six water districts from 2001 to 2005	1,565	0.81	29.5	35.4	18.7	64.7	16.6
Same residence and workplace in one of six water districts from 2001 to 2005 and water consumption	1,103	0.82	33.2	38.6	16.7	65.4	18.0
Same residence and workplace not in one of six water districts from 2001 to 2005	3,095	0.32	5.4	15.0	56.6	36.3	7.0
Bottled-water drinkers	2,321	0.59	9.6	26.9	51.4	38.7	9.9
Nonvegetable growers	33,088	0.67	13.3	22.4	34.4	51.3	14.3
Vegetable growers	10,361	0.70	15.2	27.9	35.4	51.4	13.2

^aRepresents the percentage of model results within these categories. Underprediction reflects modeling values < 0.5 times the sampling data, close approximation refers to values between 0.5 and 2 times the sampling data, and overprediction indicates values > 2 times the sampling data.

Erratum: "Global Trade Tradeoff: Rickettsial Disease in Taiwan" [120(12):A456 (2012)]

The photo caption in the December 2012 News article "Global Trade Tradeoff: Rickettsial Disease in Taiwan" (Environ Health Perspect 120:A456; doi: 10.1289/ehp.120-a456) incorrectly stated, "Striped field mice from plowed fields carried many more chiggers and ticks than mice from unplowed fields." The caption should have read, "Striped field mice from unplowed fields carried many more chiggers and ticks than mice from plowed fields."

Erratum: "New Primary Standard Set for Fine Particulate Matter Pollution" [121(3):A74 (2013)]

In a typographical error, the March 2013 News article "New Primary Standard Set for Fine Particulate Matter Pollution" (Environ Health Perspect 121:A74; doi: 10.1289/ehp.121-a74) incorrectly expressed the 24-hour primary standard and annual and 24-hour secondary standards for PM_{2.5} in milligrams per cubic meter. The standards should have been expressed as micrograms per cubic meter.

EHP regrets the errors.